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Patent Docket No.: FC0807Q1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: McShane

Serial No.: 09/675,938

Filed: 9/29/00

For: Foot and Shoe Deodorant

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) Examiner: S. Sharareh

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) Art Unit: 1617
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Commissioner, Patents
P.O. Box 1450
Alexandria, Va. 22313-1450

Response to Office Action including Amendment

Sir:

The time for response to the Notice of Non-Compliant Amendment expires on November 20, 2003. As this response is being filed prior to that date, it is not believed that any fee is due. In the event a fee is due, the Office is authorized to charge the same to deposit account no. 19-0365.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

Listing of Claims

Claims 1-31 (cancelled)

32. (new) A pressurized aerosol composition for treating foot and shoe disorders, consisting essentially of

a) micronized zinc oxide;

b) a propellant for expelling contents of an aerosol container when pressure is released, wherein said propellant is present in an amount of about 40% to about 85%;

c) about 4 to about 50 percent of a solvent selected from the group consisting of water and C₁ to C₃ alcohols, wherein said pressurized aerosol composition is for treating foot and shoe disorders.

33. (new) The composition according to claim 32 further comprising a fragrance to help mask any foot odors and/or provide a more pleasant odor to the foot or shoe.

34. (new) The composition according to claim 32 further comprising a thickening agent capable of thickening the contents of the aerosol.

35. (new) The composition according to claim 32 further comprising a base to neutralize any organic or inorganic acids.

36. (new) The composition according to claim 32, wherein the amount of micronized zinc oxide in the aerosol is in the range of from about 0.5% to about 15% by weight.

37. (new) The composition according to claim 36, wherein the amount of micronized zinc oxide in the aerosol is in the range of from about 2% to about 12% by weight.

38. (new) The composition according to claim 37, wherein the amount of micronized zinc oxide in the aerosol is in the range of from about 3% to about 10% by weight.

39. (new) The composition according to claim 32, wherein the average particle size of the zinc oxide is in the range from about 26 to about 46 nanometers.

40. (new) The composition according to claim 33, wherein the average particle size of the zinc oxide is in the range from about 30 to about 40 nanometers.

41. (new) The composition according to claim 40, wherein the average particle size of the zinc oxide is in the range from about 35 to about 37 nanometers.

42. (new) A method of inhibiting foot or shoe odor comprising administering to a foot or shoe the Composition of claim 32.

obvious to one of ordinary skill in the art at the time of invention to achieve the desirable concentration of each ingredient by routine experimentation.

4. Claims 21-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lajoie US Patent 5,466,470 in view of Lisboa et al US Patent 5,679,324.

Lajoie discloses co micronized bicarbonate salts and zinc oxide in particles sizes of 0.01 – 1.0 micron (see abstract, col 2, lines 61). Lajoie further teaches the use of zinc oxide powders in his formulations in the same amount and particles sizes as instantly claimed (see col 5, lines 1-13; col 8, lines 4-25). Lajoie also teaches the use of fragrances in his compositions (examples 3-4). Lajoie does not employ a propellant for delivery of his compositions.

Lisboa et al teaches propellant containing topical cosmetic or therapeutic compositions (see abstract). Lisboa suggests that the use of aerosol compositions gaining wide appeal among both men and women as they are easy to use (see col 1, lines 17-40). Lisboa further teaches that the use of propellants in preparing an aerosol formulation containing various cosmetically suitable ingredients is conventional. In fact, Lisboa suggests the addition of various suitable ingredients such as surfactants, thickeners, moisturizers, coolants, emollients and even sunscreen agents of choice such as zinc oxide for their known therapeutic or cosmetic use (see abstract; col 2, lines 40-67; col 3, lines 55-67; col 6, lines 14-67; col 8, lines 11-20).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to add a propellant, such as those taught by Lisboa, to the compositions of Lajoie and formulate an aerosol topical delivery system of Lajoie's

REMARKS

Claims 21 to 31 were pending. These claims have been cancelled. Claims 32 to 42 have been newly presented. The characterization of a claim as "new" is not to be taken as an admission for any purposes whatsoever.

Obviousness Rejection

Claims 21 to 31 were rejected under 35 USC § 103 as obvious over Nakane, *et al.*, U.S. Patent No. 5,122,418 ("Nakane"). (Office Action at p. 2). For the reasons set forth below, the rejection respectfully is traversed.

Nakane reportedly discloses a "composite" powder of an inorganic or organic core powder that is reportedly covered with one or more types of organic, inorganic or metallic powders. *See, e.g.*, Abstract. The "composite" powder of Nakane reportedly can be used as a skin treatment agent, in make up, as a sunburn-preventing agent or as a deodorant. (*Id.*). In one embodiment of Nakane, there reportedly is disclosed a deodorant comprising a composite powder comprised of a "synthetic resin powder" and a "hydroxyapatite." (Col. 5, Ins. 15-20). Nakane further reportedly discloses that the composite powder can comprise a "metal oxide," in place of the hydroxyapatite. Nakane reportedly discloses that "the deodorant can be used in the form of, for example, aerosols, roll-ons, powders, lotions, creams, sticks, and other external deodorants, and further, shoe lining and household use type deodorants." (Col. 6, Ins. 3 to 11).

Nakane also reportedly discloses a number of examples. Examples 30 to 40 generally reportedly disclose deodorant sprays and powders. More specifically, Examples 30 and 31 reportedly disclose aerosol deodorant sprays, yet make no mention of zinc oxide. Examples 32 to 34 reportedly are powders and make no

mention of zinc oxide. Example 35 reportedly discloses a deodorant spray containing the "composite" powder including zinc oxide in a 20 gram to 80 gram ratio to nylon in the composite powder and the powder is reportedly present in an amount of 1.5% of the composition. Thus, the zinc oxide reportedly is present in an amount of 0.3%. Further, the deodorant was reportedly applied under the test subject's arm. Example 36 discloses another spray reportedly containing zinc oxide present in an amount of 0.24% based on the composition of the Example. Examples 37 to 40 reportedly further disclose deodorant powders, yet only examples 37 and 38 mention zinc oxide.

In making the rejection, the Office Action stated that Nakane discloses micronized zinc oxide and a fragrance. (Office Action at p. 3). The Office Action further stated that the amount of zinc oxide used in Nakane's compositions falls within the same range as instantly claimed. (*Id.*). The Office further stated that Nakane's composition also comprise a propellant as an aerosol deodorant and water and C₁ to C₃ alcohols. (*Id.*) The Office then concluded that, relying upon *Sinclair & Carrol Co., Inc. v. Interchemical Co.*, 65 U.S.P.Q. 297 (U.S. 1945), that Nakane's composition would render obvious the limitations of the instant claims. (Office Action at pp. 3-4).

In view of the newly presented claims 32 to 42, it respectfully is submitted that Nakane does not render obvious the claimed invention. However, this reference will be discussed for the sake of completeness.

A *prima facie* case of obviousness, requires that the rejection describe with specificity why one skilled in the art would have combined two references to arrive at the claimed invention. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (CAFC 1999). ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the

requirement for a showing of the teaching or motivation to combine prior art references.”). The Office was required to demonstrate *where* in the reference there is a suggestion which would have “strongly motivated” one to make the formulations as claimed. *Ex parte Graselli*, 231 U.S.P.Q. 393, 394 (Bd. App. 1986). The type of motivation which would have “impelled” one to do so (*Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1301-02 (B.P.A.I. 1993)), and the type of suggestion that the changes “should” be made. *Ex parte Markowitz*, 143 U.S.P.Q. 303, 305 (Bd. App. 1964). It respectfully is submitted that the Office has not met its burden in demonstrating any suggestion or motivation to combine the various portions of Nakane to arrive at the claimed invention.

Moreover, it respectfully is submitted that the Office’s reliance on the holding of *Sinclair* is misplaced. *Sinclair* is a case of a notorious era in the history of patent law where the Supreme Court took a very anti-patent stance. Indeed, as one Justice stated, albeit it in dissent:

It would not be difficult to cite many instances of patents that have been granted, improperly I think, and without adequate tests of invention by the Patent Office. But I doubt that the remedy for such Patent Office passion for granting patents is an equally strong passion in this Court for striking them down so that the only patent that is valid is one which this Court has not been able to get its hands on.

Jungersen v. Ostby & Barton Co., 335 U.S. 560 (1949) (Justice Jackson dissenting).

Simply put, the case is from an era where patents were under attack. Furthermore, to the extent that the case discounted the manner in which the inventor arrived at the claimed invention in that case, that was overruled by the 1952 Patent Act (“Patentability shall not be negated by the manner in which the invention was made”) and no showing of any facts as to how the present invention was arrived at has been made. And mere characterization of alleged picking and choosing so

much of Nakane and the art the Office has asserted is not the stuff of a rejection under 35 U.S.C. § 103

Thus, for all of the foregoing reasons, it respectfully is submitted that the rejection of claims 32 to 42 over Nakane should be reversed.

Obviousness Rejection

Claims 21 to 31 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Lajoie, U.S. Patent No., 5,466,470 ("Lajoie"), in view of Lisboa, U.S. Patent No. 5,679,324 ("Lisboa"). (Office Action at pp. 4 to 5.). For the reasons set forth below, the rejection respectfully is traversed.

Lajoie reportedly discloses a "co-micronized" bicarbonate salt composition comprising a blend of ingredients that can include, *inter alia*, zinc oxide as one of many choices of ingredients. The Office Action alleges that Lajoie also discloses "thickeners, surfactants and fragrances" in Examples 3 and 4. Lajoie does not disclose, a fact the Office admits, any aerosol formulations.

Lisboa reportedly discloses "cosmetic aerosol foams" for shaving. The compositions of Lisboa may contain any number of additional ingredients. Lisboa reportedly states that zinc oxide may be present as a "sunscreen active agent." Col. 8, lns. 11 to 21).

In making the rejection, the Office asserted that Lajoie teaches co-micronized bicarbonate salts and zinc oxide, in addition to thickeners, surfactants and fragrances. (Office Action at p. 4). The Office acknowledged, however, that Lajoie differs from the presently claimed invention in that it does not disclose a pressurized aerosol formulation. (*Id.*).

To fill the acknowledged gap, the Office relied upon Lisboa as teaching the desirability of aerosols. (*Id.*).

The Office then concluded that "it would have been obvious to one of ordinary skill in the art at the time of the invention to add a propellant, such as those taught by Lisboa, to the compositions of Lajoie and formulate an aerosol topical delivery system of Lajoie's compositions, because one of ordinary skill in the art would have had a reasonable expectation to succeed in formulating aerosolized formulations that are easy to use and more appealing to the general consumers." (*Id.* at pp.4-5).

In view of the newly presented claims 32 to 42, it respectfully is submitted that Lisboa in combination with Lajoie does not render obvious the claimed invention. However, these references will be discussed for the sake of completeness.

The Office Action alleges that Lisboa "teaches propellant containing topical cosmetic or therapeutic compositions Lisboa suggests that the use of aerosol compositions gaining wide appeal among both men and women as they are easy to use." (Office Action at p. 4). However, Lisboa states in full that "cosmetic aerosol foam compositions, particularly those used in association with shaving are well known in the art. Aerosol shaving compositions such as shaving creams and shaving gels have been used for a number of years, with aerosol shaving gels recently gaining wide appeal among both men and women." (emphasis added) Col. 3, Ins. 16 to 22. Lisboa does not state some general desirability of formulations containing a propellant, but mentions aerosol shaving creams and shaving gels "gaining wide appeal among both men and women." For this reason, the rejection is not based on facts and should be withdrawn for this reason alone.

The Office Action further states that Lisboa "teaches that the use of propellants in preparing aerosol formulation containing various cosmetically suitable ingredients is conventional." The Office Action does not cite where in Lisboa this

assertion in made. Applicants are left to guess what portion of the disclosure of Lisboa the Office is relying upon as there is no citation to any portion of Lisboa to support this assertion.

That notwithstanding, the mere assertion by Lisboa that shaving creams utilizing a propellant are "well known" is not statutory prior art. (To treat Lisboa's statement, with regards to shaving cream, and then to extend it as such to foot and shoe deodorants, would render every propellant containing composition in the world as obvious. Surely Lisboa does not have such an effect, let alone such an effect as statutory prior art. As the precedent above clearly establishes, an obviousness rejection must be based on facts - not generalities. For this further reason, the rejection should be withdrawn.

Moreover, to the extent the Office contends that the disclosure of Lisboa that the use of propellants in shaving creams is "conventional," this too does not establish a *prima facie* case of obviousness *per se*. As the Federal Circuit has stated:

[V]irtually all [inventions] are combinations of old elements. *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) ('Most, if not all, inventions are combinations and mostly of old elements.'). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each element were sufficient to negate patentability, very few patents would ever issue.

In re Rouffet, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). Thus, whether or not a claim limitation recites the use of an "old" or "conventional" element, that fact does not render the claims as obvious *per se*, and impermissibly ignores the other limitations of the claim. And, as the Office is no doubt aware, there are no *per se* rules of patentability. *In re Ochiai*, 37 U.S.P.Q.2d 1127 (Fed. Cir. 1995).

Aside from the factual deficiencies set forth above, it respectfully is submitted that the Office Action did not set forth a *prima facie* case of obviousness. A *prima*

facie case of obviousness requires that the rejection describe with specificity why one skilled in the art would have combined two references to arrive at the claimed invention. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."). In the present case, no such explanation is found in the rejection. The Office cannot establish obviousness by locating references which describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would "impel" one skilled in the art to do what the patent applicant has done. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1301-1302 (B.P.A.I. 1993).

The Office was required to demonstrate where in Lisboa and Lajoie there is a suggestion which would have "strongly motivated" one to make the compositions as claimed. *Ex parte Graselli*, 231 U.S.P.Q. 393, 394 (Bd. App. 1986), and the type of suggestion that the changes "should" be made. *Ex parte Markowitz*, 143 U.S.P.Q. 303, 305 (Bd. App. 1964). The rejection fails to provide any specific reason why one would be motivated, let alone impelled, to combine Lisboa with Lajoie in the manner suggested by the Office. Thus, the rejection fails to set forth the required facts and reasoning required to support a *prima facie* case of obviousness. Accordingly, it respectfully is submitted that the rejection of claims 21 to 31 for this basis should be withdrawn.

Moreover, the claims to require that the aerosol be an aerosol for treating foot and/or shoe odors. The rejection fails to identify where in Lajoie or Lisboa such a limitation can be found. Indeed, as is fundamental, all properties and attributes of a claimed invention must be considered by the Office. *In re Antonie*, 195 U.S.P.Q. 6, 8 (C.C.P.A. 1977). For this further reason, the rejection should be reversed.

Regarding the Office Action's contention that the skilled artisan would have had a reasonable expectation of success in formulating aerosolized formulations "that are easy to use and more appealing to the general consumers," applicants respectfully disagree with this contention. In order for a reference to provide a reasonable expectation of success, the references themselves must provide such an expectation in addition to the suggestion to combine. *In re Dow Chemical*, 5 U.S.P.Q.2d 1529 (Fed. Cir. 1988). The applicant's own disclosure may not be the source of a reasonable expectation of success. The only facts the Office Action pointed to was a statement in the "background" of the invention of Lisboa that aerosol foam compositions are well known, and some general conclusion that there is a need for formulations that "are easy to use and are more appealing to the general consumers." This standard for a reasonable expectation of success or a motivation to combine is not found in either of the references, and is thus not of record, and is contrary to the law of obviousness. "Ease of use" and "appeal" to consumers is no substitute for a disclosure in the art that one would have had a reasonable expectation of success in formulating the aerosol formulations containing the particular ingredients recited in the claims of the present invention.

Accordingly, for the reasons set forth above, entry of the amendments, withdrawal of the rejections, and allowance of all of the pending claims respectfully is requested. If the Examiner has any questions regarding this paper, please do not hesitate to contact the undersigned attorney.

Respectfully submitted,

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